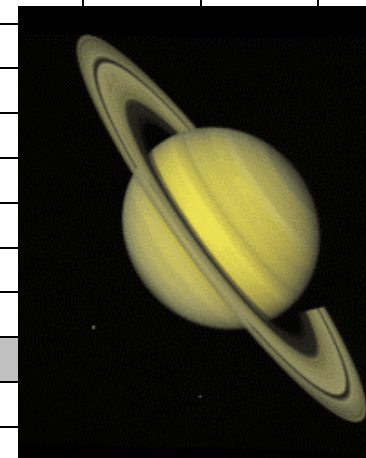


Fast Facts About Saturn

Planetary Parameters		Ratio (Saturn/Earth)									
Planet Type	Gas Giant (unlike a solid, rocky planet like Earth)										
Average Distance from Sun (kilometer)	1,426,800,000 compared to Earth's 149,600,000	9.54									
Equatorial Diameter (kilometer)	120,536 as compared to Earth's 12,756	9.45									
Mass (10 ²⁴ kilogram)	568.46 as compared to Earth's 5.9736	95.16									
Volume (10 ¹⁰ kilometer ³)	82,713 as compared to Earth's 108.321	763.60									
Average Density (gram/centimeter ³)	0.69 as compared to Earth's 5.52	0.12									
Surface Gravity (meter/second ²)	8.96 as compared to Earth's 9.78	0.92									
Magnetic Field (gauss-Rh ³)	0.21 as compared to Earth's 0.3076	0.68									
Orbital Parameters											
Year Length (One Orbit Around the Sun)	29.46 Earth years										
Day Length (One Rotation on its Axis)	10.5 Earth hours										
Inclination of Axis (degrees)	26.73 compared to Earth's 23.45										
Atmosphere and Climate											
Average Surface Temperature (C)	-180 as compared to Earth's 14.8										
Maximum Temperature (C)	-113 at one bar as compared to Earth's 47										
Minimum Temperature (C)	-153 at one bar as compared to Earth's -33										
Atmospheric Pressure at Surface	Greater than 100 bars (Earth = 1 bar). This pressure exerts a force of 0.19 kg/m3 at 1 bar compared to Earth's atmosphere which exerts a force of 1.217 kg/m3 at 1 bar (sea level).										
Major Atmospheric Gasses	96% Hydrogen, 3.3% Helium, 4,500 ppm Methane, 125 ppm Ammonia										
Summary of Water	Although Saturn is water ice-rich (suspended as crystals in the gaseous planet and at its core), it has no known liquid water or water vapor.										
Planetary Features											
General Overview	Saturn rotates so fast, it is flattened at the poles. Winds up to 1600 kilometers per hour create a banded appearance of the surface clouds. Extensive ring system made mostly of ice crystals. The moon, Titan, is larger than Mercury, has an atmosphere rich in nitrogen, and is enveloped in a hydrocarbon-rich haze.										
Core Composition	Superheated water or rock and ice										
Known Moons/Rings	18 moons, seven over 400 km in diameter; Thousands of rings in six major groupings.										
Visits to Saturn											
1950-79	1979: Pioneer 11 (US), flyby, imaged polar regions and Titan. Detected internal source of heat										
1980-99	1980: Voyager 1 (US), flyby, sent back 17,500 images of planet, rings, and moons. Measured wind speeds. 1982: Voyager 2 (US), detailed imagery of rings and moons. Studied Titan's atmosphere. 1997: Cassini/Huygens orbiter launched for a 2004 arrival.										



Some Views of Planet Saturn

